

Elaine McCluskey

From: Elaine McCluskey [mccluskey@fnal.gov]
Sent: Thursday, November 18, 2004 3:14 PM
To: Bill Foster; Chuck Federowicz; David Finley; David Harding ; Dixon Bogert; Duane Plant; Ed Crumpley; 'Erene Noyola'; fgarcia@fnal.gov; 'Margie Bruce'; Rich Stanek; Shekar Mishra; 'Steve Geer'; Tom Lackowski; Vic Kuchler; Weiren Chou
Subject: Notes from 11.17.04 Linac Proton Driver Meeting - Civil

NEXT MEETING WILL BE 11/24/04 IN conFESSional AT 9:30 A.M.

Attendees: Bill Foster, Fernanda Garcia, Chuck Federowicz, Dave Finley, Tom Lackowski, Rich Stanek, Weiren Chou, Duane Plant, Elaine McCluskey

Items discussed:

1. Updated alignment – Weiren and Chuck to verify a few items, but this seems to be it. Total length of Transport Line = 3413', beginning of Linac about 800' from Main Ring Lake
2. Site Plan
 - a. Location of Debuncher/Transport Line building was discussed. Bill thought it might function best just east of Kautz Rd. Chuck will try to fit it in there – geography is tight. May lose one existing MI stair that would have to be rebuilt – might have to rebuild it anyway.
 - b. Chuck reviewed his preliminary soil calculation result – would have excess soil from construction of tunnel. Proposes raising Klystron, Upstream, Cryo, and Pump building elevations about 1.5' to increase drainage. This would likely use up excess soil. All concurred increased drainage would be very good in this area.
 - c. Discussed installation logistics
 - i. May want to have installation ramp (like major and minor vehicle accesses in MR tunnel) at Upstream Building
 - ii. Can two carts pass in Linac? Duane to check cart widths.
 - iii. May want to enable installation at center of tunnel length – what about SNS?
 - iv. Longest item identified would be cryomodules at 12-14 m long
3. Alcoves – discussed rationale for having alcoves in MI. Do they exist in SNS, and if so, have they been helpful? Elaine to explore further. Have put 10 alcoves in cost estimate for now.
4. Stairs – Looked at sketches that have been developed for stair in mid-Linac. Desire for enclosed, plus rearrange to be standard scissors-type so could be metal pan (cheaper). Will revise drawing.
5. Linac cross-section
 - a. Beam elevation – Keep at MI elevation (existing shows 4'-4" off floor versus 2'-3" for MI)
 - b. Bill to get new Linac equipment cross-section that shows different cavities. These will likely have lower beam elevation, more like MI.
 - c. Waveguides – alignment shown with top end high in Gallery and bottom end coming into top of tunnel is acceptable.
6. Tom suggested developing a common nomenclature for elements of the facility, including stationing along the length (cellbays in MI, for example). Maybe Weiren could take lead on this (although he'd already left the meeting).

ITEMS FOR NEXT WEEK:

New site plan

Drawing status

Some report from Dixon on SNS visit and possible response to SNS questions from this meeting, as he was most recent visitor.

More nomenclature discussion?

ACTION ITEMS:

Duane will check cart widths and estimate whether 2 can pass in Linac

Chuck will move Transport Line Building, finalize alignment with Weiren, and make final site plan.

Bill will get new equipment cross-section for Linac tunnel.

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Elaine McCluskey
Fermi National Accelerator Laboratory
FESS Engineering
(630) 840-2193
mccluskey@fnal.gov